DOCUMENT RESUME

ED 434 724 PS 027 561

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TITLE Children's Academic Achievement and Participation in Out-of-School Activities in the Early Elementary School Years.
PUB DATE 1999-04-00
NOTE 36p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Albuquerque, NM, April 15-18, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Academic Achievement; Elementary Education; *Elementary School Students; Extracurricular Activities; Grade 1; Grade 4; Grades (Scholastic); Predictor Variables; Sex Differences; Student Interests

ABSTRACT

This study examined associations between children's participation in out-of-school activities and academic achievement in a sample of first- and fourth-grade children from ethnically and economically diverse families. A total of 116 mothers and their first- or fourth-grade child participated in the study. The sample consisted of families with annual incomes of less than $30,000 per year. Regression analyses showed that an increase in the length of time (months and years) a child participated in out-of-school activities was positively associated with higher report card grades. Regression analyses also showed that an increase in the number of organized activities and frequency of participation in organized activities were associated with lower report card grades for males. Different patterns of association were identified for activities with and without an organizational context, for males and females, and for first- and fourth-grade children. (Contains 20 references.) (Author/EV)

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Children's Academic Achievement and Participation in Out-of-School Activities in the Early Elementary School Years

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Poster Presented at the Biennial Meeting of the
Society for Research in Child Development

Albuquerque, New Mexico

April 15-18, 1999

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Abstract

This study examined associations between children's participation in out-of-school activities and academic achievement in a sample of first- and fourth-grade children from ethnically and economically diverse families. A total of 116 mothers and their first- or fourth-grade child participated in the study. The sample consisted of families with annual incomes of less than $30,000 per year. Regression analyses showed that an increase in the length of time (months and years) a child participated in out-of-school activities was positively associated with higher report card grades. Regression analyses also showed that an increase in the number of organized activities and frequency of participation in organized activities was associated with lower report card grades for males. Different patterns of association were identified for activities with and without an organizational context, for males and females, and for first- and fourth-grade children. Implications of the findings are discussed in light of the broader literature on children's involvement in extracurricular activities.

Children's Academic Achievement and Participation in Out-of-School Activities in the Early Elementary School Years

The debate over the advantages/disadvantages of extracurricular activities for children's academic achievement has a long history that continues today as an important issue in the lives of children, families and schools. The core of the debate rests in competing ideas about the best uses of children's time outside of school (Holland & Andre, 1987). Proponents of child participation in extracurricular activities tend to embrace a developmental perspective and often cite research suggesting that participation in activities promotes a host of advantageous social and academic benefits such as increases in self-esteem, responsibility and leadership. Opponents of child participation in extracurricular activities generally argue that time spent in extracurricular activities would be better spent pursuing academic activities such as homework. Some opponents suggest that participation in non-academic extracurricular activities may actually counter the purpose of school (Lisella & Serwatka, 1996).

The purpose of the current study was to examine the relationship between participation in out-of-school activities and academic achievement in a sample of first- and fourth-grade children from ethnically and economically diverse families. In contrast with the focus on high school and college-age populations in linking participation in activities and academic achievement, we studied a sample of elementary students. Existing research points to the importance of the early elementary years for children's adjustment to schooling (Alexander & Entwisle, 1996), and theoretical models suggest the early elementary years are important years in forming conceptualizations about school (Finn, 1989; Marsh, 1992).

Theoretical work supports the idea that child participation in extracurricular activities may enhance child engagement with school (Finn, 1989) and commitment to school (Marsh, 1992). Finn's (1989) participant-identification model offers a way to understand children's disengagement with school as a developmental process that may begin in the earliest grades. The model focuses on students' "involvement in schooling," with behavioral and emotional components. A key feature of this model is that a child will be more likely to successfully complete 12 years of schooling if the child maintains multiple forms of participation in school-relevant activities beginning in the early elementary years. According to Finn's model, participation in extracurricular activities is seen as one way to increase a student's stake in and identification with school. Marsh's (1992) commitment to school hypothesis theorizes that participation in extracurricular activities increases a student's academic self-concept, which in turn mediates school performance. Both of these models are based on conceptualizations of human development suggesting that children tend to develop along developmental trajectories that are supported by a network of influences outside of the child (Bronfenbrenner, 1995; Cairns & Cairns, 1994; Magnusson, 1995).

Holland and Andre (1987) offered a comprehensive review of the literature relating to extracurricular participation and adolescent development. The review shows a consistent pattern of positive associations between participation in extracurricular activities and desirable personality/social characteristics such as higher levels of self-esteem, improved race relations, involvement in political and social activity, educational aspirations, and lower delinquency rates. The research linking participation in extracurricular activities with academic achievement is less

consistent, however. Some studies reveal a positive association between participation in extracurricular activities and academic achievement (Gerber, 1996) and prevention of early school dropout (Mahoney & Cairns, 1997), while others do not (Lisella & Serwatka, 1996). Using a national data set, Lisella and Serwatka (1996) found that in one half of the study participants there were significant differences in the achievement levels between male participants who were involved in extracurricular activities and male participants who were not involved in extracurricular activities. In all but one of the cases with significant differences, participants in extracurricular activities had lower achievement levels than did nonparticipants in extracurricular activities.

Research on children in the early elementary years has not directly investigated associations between children's out-of-school activity participation patterns and academic achievement. Finn and Cox (1992) studied the relationship between in-class participation/withdrawal and academic achievement in a sample of fourth-grade students. They found that children who were active participants in class experienced greater academic success than did nonparticipants. This study did not examine associations between participation in extracurricular activities and academic achievement, although this association is an important component of the participant-identification model set forth by Finn (1989). Finn and Cox suggest that more research is needed in the area of children's participation in activities to give further definition to the constructs of involvement and engagement in school. Other studies of children in the early elementary years focus on children's out-of-school physical activity patterns (DeVoe & Mize, 1992; National Center for Education Statistics, 1992), parent reports of children's out-of-

school activities (Stevenson & Lee, 1990), and associations between children's time use in specific activities (i.e., television viewing, reading, time spent on homework, etc.) and cognitive competence in specific academic domains such as reading (Anderson, 1988).

Holland and Andre (1987) suggested that type of activity is an important variable to consider when studying patterns of participation among students. Their review of research with older students suggested that participation in activities is not uniform across all settings and types of activities. This study examined the full range of activities that elementary children may participate in during non-school and weekend hours. In the current study, we conceptualized the range of activities as activities with an *organized structure* or an *unorganized structure*. Organized activities have a structured component such as regular meetings and adult leadership. Examples include sports, music/dance, scouts, etc. Unorganized activities are those in which children may participate without a formal organizational structure. Playing with friends, watching television, and reading books are examples of unorganized activities.

Participation was conceptualized as a multifaceted variable in this study. The total number of activities in which the child participates, the frequency of participation in activities (daily, weekly, monthly, etc.), and the length of participation in activities (how many weeks, months or years the child has participated in the activity) were measured. Further, child gender was examined because a number of studies show that overall activity patterns vary by child gender (Camp, 1990, Devoe & Mize, 1992; Holland & Andre, 1987; Lisella & Serwatka, 1996). Child grade level in school also was examined to better understand the developmental nature of the participation.

The following questions were investigated:

- Do the number of activities, frequency of participation and length of participation in out-of-school activities predict children's academic achievement?
- Do patterns of association between participation in out-of-school activities and children's academic achievement differ by the organizational context of the out-of-school activity?
- Do patterns of association between participation in out-of-school activities and children's academic achievement differ by the child's grade level or child gender?

Methods

Subjects

A total of 116 children and their mothers participated in the study. Families with annual incomes of less than $30,000, and with mothers who did not graduate from a four-year college or university were included in the sample. The mother-child dyads lived in one of three diverse communities in a Midwestern state. Fifty-six percent of the children were female, and 44% were male. Twenty-seven percent of the sample was African-American, 19% was Hispanic, and 53% was Anglo. Additional demographic information is available in Table 1.

Insert Table 1 about here

Measures

Child's Out-of-School Activities Interview. In a joint interview, mothers and children answered questions about the child's out-of-school and weekend activities. The interviewer showed the parent and child a list of 14 activities that children might engage in outside of school. The mother and child jointly identified the child's out-of-school activities and were provided the opportunity to include other activities that were not included on the list. The listed activities included those with an *organizational context* such as sports, scouts, and music/dance, and those *without an organizational context* such as watching television, playing with friends, reading books, and doing homework or chores. The list of activities is included in Table 2.

Insert Table 2 about here

The interviewer asked the parent and child a series of questions about the selected activities. The interviewer asked: a) How often do you go to (or do) this activity? b) How long have you been going to (or doing) this activity? c) Do you like going to (or doing) this activity?

The parent/child dyad was given the opportunity to discuss and develop a consensus rating for the first two questions. The child alone was asked to answer the third question. The interviewer showed the dyad response cards which included response categories for each of the three questions. The response options for the first question, the frequency of activity, ranged from 1 to 7 (1 = once a year; 2 = every 2-6 months; 3 = once a month; 4 = once every other week; 5 = once a week; 6 = 2-3 times per week; 7 = at least once a day). The response options

for the second question, duration of activity, ranged from 1 to 7 (1 = less than 1 month; 2 = between one and six months; 3 = between 6 months and 1 year; 4 = between 1 to 2 years; 5 = between 2 to 3 years; 6 = between 3 to 4 years; 7 = more than 4 years). The response options for the third question, child enjoyment of activity, ranged from 1 to 3 (1 = no, 2 = mixed response, 3 = yes).

A total of 9 scores were computed from the out-of-school activities interview. The *number of activities* the child participated in was calculated by summing the actual number of activities in which the child was involved. A larger score indicates the child participated in a greater number of activities. The *mean frequency of participation* score was computed by dividing the sum of the frequency score (of selected activities) by the number of activities in which the child was involved. A larger mean frequency of participation score indicates the child participated in the activity more often. The *mean length of participation in activity* score was computed to determine the average length of time in which the child had been involved with an activity. The length of participation score was computed by summing the length score for each selected activity and dividing the sum by the number of activities in which the child participates. The number of activities, frequency of participation and length of participation in activity scores were computed three times - once based on scores from all the activities, once based on scores from the activities with a organized context, and once based on the scores from the activities without an organized context.

Academic Achievement. The child's report card grades from the final grading period of the school year were used to measure the child's performance in school. A mean rating of the

child's grades in spelling, writing, reading, English, social studies, math and science was generated for each child. A mean rating of 4.3 corresponded with an A+ report card average, and a rating of 0 designated a failing report card average. A within site and within grade z-score transformation of the child's grade point average was computed and used in all analyses. The report card grade scores ranged from -1.0 to 1.0. The California Test of Basic Skills (CTBS) standardized achievement test scores were obtained for each child who participated in the study. The CTBS national percentile scores, standardized within each grade level, were used throughout all analyses.

Procedure

Parents of children in the first or fourth grade in the three communities received letters distributed by the child's classroom teacher inviting their participation in a larger study designed to explore family contributions to children's learning. Parents and children who agreed to participate in the larger study were individually interviewed by trained interviewers. The out-of-school activities interview was administered as part of the larger interview protocol. School administration officials assisted with providing report card grades and standardized achievement scores for the children of families who were participating in the study.

Results

Descriptive Findings

Number of Out-of-School Activities. Table 2 shows the percentage of dyads who reported participating in organized and unorganized activities. Among the organized activities,

the greatest percentage of parent/child dyads reported the child attending church/synagogue (76%). Between 25% and 35% of the sample reported participating in either organized music, sports or scouting. Out of the entire sample of 116 dyads, 102 (88%) dyads reported the child participated in one or more organized activities. Among the unorganized activities, 90% or more of the parent/child dyads reported that the child participated in homework, chores, playing with friends, watching TV and reading books.

Insert Table 3 about here

Table 3 provides the mean, standard deviation and range scores for the number of out-of-school activities by child gender, child grade level in school, and site. For the total sample, children participated in an average of 9.2 activities (mean for organized activities = 2.3, S.D. = 1.3; mean for unorganized activities, = 6.9, S.D. = 1.1). There were no significant differences in the number of activities based on child gender or child grade level in school. Child participation in unorganized activities differed by site, $F(2,113) = 7.8$, $p < .01$. Student-Newman-Keuls post hoc test revealed that children from Site B participated in significantly fewer organized activities than did children from Site A or Site C.

Frequency of Participation in Out-of-School Activities. Table 2 shows the percentage of dyads who reported varying levels of the frequency of participation in out-of-school activities. Among the organized activities, the largest percentage of dyads reported going to church/synagogue once a week (35%). Among the unorganized activities, the largest percentage of children participated in television viewing on a daily basis. Interestingly, 93% reported

watching television daily, whereas 50% of the sample reported reading a book daily.

Table 3 shows the mean and standard deviation scores for the frequency of participation in activities variables by child gender, child grade level in school, and site. On the average, the dyads reported participating in activities about once a week (all activities mean = 5.7, S.D. = .46; organized activities mean = 4.6, S.D. = 1.2; unorganized activities mean = 6.1, S.D. = .50). One- way analysis of variance analyses revealed a significant difference in how often the child participated in organized activities based on child grade level in school, $F(1,108) = 4.3$, $p < .04$. Fourth-grade children (mean = 4.8, S.D. = .97) participated in organized activities significantly more often than did first-grade children (mean = 4.4, S.D. = .10). There were no significant differences in how often the child participated in organized or unorganized activities based on child gender or site.

Length of Participation in Out-of-School Activities. Table 2 shows the percentage of children who participated in organized and unorganized activities for differing lengths of time. Among the organized activities, the largest percentage of children had attended church or synagogue for four or more years (39%). The majority of children had participated in sports for one to two years, and music or dance for one to two years. Among the unorganized activities that children had been involved with for four or more years, the largest percentage of dyads reported watching television for over four years (91%). The smallest percentage of children reported utilizing the library for four or more years (21%).

Table 3 shows the mean and standard deviation scores for the length of participation activities scores by child gender, child grade level in school, and site. On the average, the dyads

indicated the child had been involved in the activities for approximately two to three years (all activities mean = 5.8, S.D. =.8; organized activities mean = 5.2, S.D. = 1.5; unorganized activities mean = 5.7, S.D. = .8). One-way analysis of variance analyses revealed a significant difference in all three activity scores by the child's grade level in school, ($F(1, 114) = 46.0$, $p < .01$, all activities; $F(1,105) = 11.6$, $p < .01$, organized activities; and $F(1,114) = 70.6$, $p < .01$, unorganized activities). In all three analyses, children in fourth grade (overall mean = 6.2, S.D. = .6; organized activities mean = 5.7, S.D. = 1.3; unorganized activities mean = 6.4, S.D. = .6) participated in the activities for a longer period of time than did children in first grade (overall mean = 5.3, S.D. = .7; organized mean = 4.7, S.D. = 1.5; and unorganized mean = 5.5, S.D. = .7).

Table 2 shows the percentage of children who reported enjoying or not enjoying the out-of-school activities. Among the organized activities, a larger percentage of children said they enjoyed the activities than said they didn't enjoy or felt mixed about the activities. Among the unorganized activities, the largest percentage of children said they enjoyed playing with friends, watching TV, and reading books.

Academic Achievement. Table 4 shows the mean and standard deviation scores on student report card grades and standardized achievement scores by child gender, grade level in school, and site. One way analyses of variance revealed there were no significant differences in students' report card grades by site, child gender, or child grade level in school. A one-way analysis of variance on standardized achievement scores revealed a site difference, $F(2, 114) = 21.8$, $p < .001$. Student-Newman-Keuls post hoc tests revealed that students from Site C (mean = 67.9, S.D. = 22.5) had significantly higher standardized achievement scores than did

students from Site A (mean = 33.7, S.D. = 21.8) or Site B (mean = 52.5, S.D. = 24.9). Further, the scores of students from Site B were significantly higher than the scores of students from Site A.

Insert Table 4 about here

Patterns of Association Between Out-of-School Activities and Academic Achievement

A series of regression analyses were conducted to determine if the number of activities, frequency of participation, or length of participation scores significantly predicted children's report card grades or standardized achievement scores. The analyses were conducted within grade level and gender as well as for the overall sample. Table 5 shows F values and the final beta scores for the regression analyses.

Insert Table 5 about here

Number of Out-of-School Activities. Organized activity regression analyses revealed a significant negative association between the number of organized activities in which the child was involved and the child's grade point average, ($\beta = -.58$, $p < .05$). The analyses within child gender revealed the negative association was significant for males ($\beta = -.93$, $p < .01$), but not for females ($\beta = .15$, $p < .70$). Further, the analyses within child grade level in school revealed a strong negative association within first grade ($\beta = -.97$, $p < .01$), but no significant association in fourth grade ($\beta = -.04$, $p < .60$). Taken together, these findings reveal that lower grade point averages were significantly associated with child involvement in a larger number of out-of-school activities.

The analyses within subsamples shows the associations were found primarily among first-grade children and among males.

The number of activities did not significantly predict standardized achievement scores for the children in the sample. A marginally significant negative trend was identified for males only between the total number of activities and standardized report card grades. For males, the trend indicated a greater number of activities was associated with lower standardized achievement scores.

Frequency of Participation in Out-of-School Activities. A significant negative association was identified between the frequency of participation in organized activities and report card grades ($\beta = -.63$, $p < .03$). Separate regression analyses conducted within child gender and child grade level revealed a negative association between frequency of participation in organized activities and report card grades for males ($\beta = -.85$, $p < .05$) but not for females ($\beta = -.04$, $p < .91$), and for first graders ($\beta = -.97$, $p < .01$) but not fourth graders ($\beta = -.15$, $p < .46$). Thus, an increase in the frequency of participation in organized activities was associated with a decrease in report card grades in males and first grade children. No significant associations were identified between the frequency of participation in activities and children's standardized achievement scores.

Length of Participation in Out-of-School Activities. As seen in Table 5, length of participation in out-of-school activities was significantly and positively associated with children's standardized report card grades. This association was identified for the analyses based on the total number of activities, and the activities with and without an organizational context.

Children's involvement in activities for longer periods of time (months and years) was significantly associated with higher report card grades.

Among activities with an organizational context, the analyses conducted within child gender and child grade level revealed a significant positive association between length of participation in out-of-school activities and children's report card grades for both males and females, and for first and fourth grade children. The pattern of association shows that for both genders and at both grade levels the child's involvement in activities with an organizational context for longer periods of time is associated with higher report card grades.

Among the activities without an organizational context, the analyses conducted within child gender revealed for males a marginally significant positive association between length of participation in activities and children's report card grades ($\beta = .25$, $p < .07$), and no significant association for females ($\beta = .08$, $p < .55$). Length of participation in unorganized activities significantly predicted report card grades for first ($\beta = .33$, $p < .02$), but not fourth grade children ($\beta = .15$, $p < .30$). These findings suggest that for activities without an organizational context, involvement for longer periods of time was associated with higher report card grades among first grade children. There was also a trend toward this association for males.

Table 5 also shows the results of the regression analyses predicting the out-of-school activities variables on standardized achievement scores. Length of participation in out-of-school activities did not significantly predict standardized achievement scores in any of the models tested. Although the overall model did not obtain significance, length of participation in activities without an organizational context was significantly positively associated with standardized achievement

scores for the overall sample ($\beta = .22$, $p < .05$), for males ($\beta = .33 < p < .04$), and first-grade children, ($\beta = .32$, $p < .05$). These findings suggest a nonsignificant trend toward an association between increases in the length of participation in activities and standardized achievement scores.

Discussion

The findings of this study suggest that the either/or debate surrounding participation in out-of-school activities should be expanded to consider the circumstances in which participation in out-of-school activities may be helpful or harmful to various aspects of children's academic achievement. The complex set of associations identified suggest that a unidimensional view of participation in out-of-school activities fails to capture important aspects of the relationship between participation in activities and children's academic achievement. Further, the findings lend support to Finn's (1989) and Marsh's (1992) general theoretical hypothesis that participation in extracurricular activities may have an association with children's early school experiences. This study offers evidence that associations involving participation in activities should be considered separately by child gender, child grade level in school, type of activity, and aspect of academic achievement.

An increase in the length of time of participating in organized activities was associated with higher report card grades (especially for males and first-grade children), while an increase in the number of organized activities and the frequency of participation in the organized activities was associated with a decrease in report card grades. This finding offers empirical evidence to support both sides of the participation in out-of-school activities debate. The negative

associations between the number of organized activities/frequency of activities and report card grades support the claim that involvement in out-of-school activities is associated with lower grades. However, the positive association between how long a child has been participating in an activity and the child's report card grades supports the claim that there may be academic benefits to involvement in out-of-school activities.

The pattern of findings suggests that depth versus breadth of participating in activities may be an important distinction. The findings suggest that participation in a greater number of organized activities is not necessarily better for children and, in fact, may be detrimental to children's academic achievement. Thus, there may be benefits for children who become involved with a fewer number of organized activities but stay involved with the activities for longer periods of time. Although not directly measured in this study, perhaps children who participate in an organized activity for longer periods of time have opportunities to learn a skill or talent in a more detailed way, which may transfer into skills that are advantageous for performance in school.

The idea of encouraging children to explore a skill, interest or subject in detail has received considerable support in recent years from the educational community. Developmental theorists such as Piaget and Vygotsky discuss the educational benefits of encouraging children to explore and manipulate materials to develop elaborated cognitive structures (see Krogh, 1997 for a brief summary). Recent advances in the development of early childhood education curriculum models such as the Project Approach (Katz & Chard, 1989) and the Webbed Model (Krogh, 1995) promote the importance of allowing children extended periods of time to research and understand subjects. Even popular press authors of parenting materials claim educational benefits

for children who explore a subject area, such as music education, in detail (Kavanaugh, 1995).

These findings support Finn's participation-identification model (Finn, 1989) and Marsh's commitment to school hypothesis (Marsh, 1992) by showing a positive association between length of participation in organized out-of-school activities and children's academic achievement in the early elementary grades. However, since the relationships identified are not known to be causal, the direction of influence between participation in out-of-school activities and academic achievement is not clear. That is, participating in organized activities outside of school may enhance children's thinking abilities (as suggested above) thereby facilitating good performance in school. On the other hand, it may be that children who are doing well in school seek participation in organized out-of-school activities while those who are doing less well are spending more time in homework or other non-organized activities.

Child gender appears to be an important variable in understanding the associations between participation and academic achievement. The positive association between length of participation in organized activities and report card grades was identified in the subsamples for both boys and girls, but the negative association between the number of activities and frequency of participation and report card grades was identified for boys only. It is not clear why this pattern differs for boys and girls. One hypothesis is that the more rapid maturation of girls than boys in the early elementary years may reduce the negative impact of a greater number of activities and activities participated in more often.

It was not surprising to find that older children participated in more organized activities than did younger children, and that older children participated in activities for a longer period of

time than did younger children. Length of participation in activities was significantly and positively associated with report card grades at first and fourth grade, whereas the significant negative correlations between grades and number of activities and frequency of participation were no longer significant at fourth grade (although the direction of the association is negative). This pattern of association suggests that participation in a greater number of organized activities and participation in organized activities for longer periods of time may undermine children's academic performance at first grade but not at fourth grade. The overall pattern of association suggests that participation in activities may be associated with different outcomes at first and fourth grade.

Participation in organized out-of-school activities was consistently associated with report card grades but not with standardized achievement scores. Out-of-school activities may contribute in a more direct manner to daily experiences in school than to the types of knowledge and skills tapped by standardized achievement tests.

The organizational structure of out-of-school activities is an important aspect of associations between children's participation in out-of-school activities and academic achievement. Negative associations were identified between the number of activities/frequency of participation and report card grades for activities with an organized structure but not for activities without an organized structure. In contrast, for both types of activities (i.e., activities with and without an organized structure), increases in the length of participation in activities were associated with higher report card grades. Therefore, regardless of the organizational structure of the activity, there appear to be academic advantages for children when they participated in activities for longer periods of time. Considering only organized activities, the findings suggest an

academic disadvantage for children who participated in a greater number of organized activities and who participated in organized activities more frequently.

The findings of this study may help us understand why school officials and families may be conflicted about setting school policies and making family decision about how children should spend their time outside of school. The study suggests that school officials, parents and children need to ask questions such as, "How many activities are you participating in?" and "How often do you participate in these activities?" to gain a fuller understanding of the role of participation in activities upon the child's academic achievement. While it is not practical to suggest that policy should be set to dictate how many activities the child may/should participate in or how often the child may/should participate in activities, these findings suggest there is benefit in examining children's participation in activities in a broader context.

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Table 1

Demographic Profile of Parent-Child Dyads

	n	%		n	%
Site			**Hours Worked Per Week**		
East Chicago	33	28	10 hours or less	10	18
Indianapolis	36	31	11-20 hours	4	8
Logansport	48	41	21-30 hours	12	15
Child Gender			31-40 hours	28	51
Male	64	55	41-65 hours	5	10
Female	52	45	**Family Structure**		
Parent Ethnicity			Two parent family	53	45
African-American	32	27	Mother headed	56	48
Anglo-American	62	53	Cohabiting adults	4	3
Hispanic	23	20	**Annual Income**		
Employment Status			Less than $10,000	52	44
Employed	63	54	$10,000-$19,999	29	25
Not Employed	54	64	$20,000 - $29,999	36	31
Mother's Level of Education					
Some high school	36	31			
Completed high school	49	42			
Some college or vocational school	31	27			

Table 2
Percentage of Children Participating in Organized and Unorganized Out-of-School Activities

	Unorganized Activities									Organized Activities				
	Shop-ping	Home-work	Chores	Play alone	Play w/ friends	Watch TV	Read Books	Special Projects	Library	Music	Sports	Church/ Synagogue	4-H	Scouts
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Participate	89	91	90	77	97	97	95	66	72	25	34	76	3	3
Not selected	10	8	10	22	3	2	4	34	28	74	65	23	96	65
How Often														
Once a year	1	0	0	2	0	0	0	1	2	1	0	0	1	1
2-6 months	2	0	1	0	0	1	1	6	12	0	1	3	1	3
Once a month	10	2	0	3	1	0	2	15	22	0	5	9	2	4
Every other week	21	2	6	2	2	0	5	9	14	1	1	10	3	5
Once a week	38	3	13	10	4	1	11	10	16	8	3	37	0	13
2-3 times/week	15	25	21	17	22	3	27	16	4	7	14	18	0	6
Once a day	3	60	49	43	68	93	50	10	3	8	10	0	0	3
Not selected	10	8	10	22	3	2	4	33	28	74	65	23	96	65
How Long														
Less than 1 month	1	0	3	3	0	0	0	3	2	0	1	3	0	3
1 to 6 months	1	4	2	1	1	0	3	3	3	2	7	4	1	3
6 months - 1 year	2	14	9	1	0	0	10	6	6	3	2	5	0	10
1-2 years	4	20	19	5	6	1	13	12	7	6	10	6	0	5
2-3 years	6	10	22	3	4	0	10	9	7	2	4	10	1	6
3-4 years	8	7	15	1	10	4	12	3	12	4	3	6	0	1
More than 4 years	64	37	21	60	75	91	45	23	21	8	5	39	0	3
Not selected	13	8	10	24	3	3	5	40	41	75	66	26	97	68

Table 3
Mean, Standard Deviation, and Range of Out-Of-School Activities by Grade Level, Child Gender, and Site

	All Activities				Organized Activities				Unorganized Activities			
	N	Mean	SD	Range	N	Mean	SD	Range	N	Mean	SD	Range
Number of Activities												
Overall	116	9.2	1.9	3-13	116	2.3	1.3	0-5	116	6.9	1.1	3-8
First Grade	60	9.1	2.1	3-12	60	2.1	1.3	0-5	60	7.0	1.2	3-8
Fourth Grade	56	9.3	1.7	6-13	56	2.5	1.1	0-5	56	6.8	1.1	5-8
Males	52	9.0	2.1	3-12	52	2.3	1.5	0-5	52	6.7	1.3	3-8
Females	64	9.3	1.7	5-13	64	2.3	1.1	0-5	64	7.1	0.9	4-8
Site A	33	9.6	1.4	7-12	33	2.6	0.9	1-4	33	7.2	0.8	6-8
Site B	36	8.5	2.3	3-12	36	2.1	1.5	0-5	36	6.3	1.4	3-8
Site C	47	9.4	1.7	5-13	47	2.3	1.3	0-5	47	7.1	.95	5-8
How Often Participate												
Overall	116	5.7	0.5	4.2-6.7	110	4.6	1.2	1-7	116	6.1	0.5	3.7-7.0
First Grade	60	5.7	0.5	4.2-6.6	54	4.4	0.1	1-6	60	6.2	0.5	3.7-7.0
Fourth Grade	56	5.7	0.4	4.9-6.7	56	4.8	1.0	2-7	56	6.1	0.5	5.2-7.0
Males	52	5.7	0.5	4.6-6.7	48	4.6	1.2	1-7	52	6.2	0.5	5.1-7.0
Females	64	5.7	0.5	4.2-6.8	62	4.6	0.8	3-7	64	6.1	0.5	3.7-7.0
Site A	33	5.7	0.5	4.6-6.6	33	5.7	0.4	4-6	33	6.0	0.4	5.1-6.8
Site B	36	5.8	0.5	4.2-6.6	32	4.6	1.2	6-7	32	4.6	1.2	1.0-7.0
Site C	47	5.7	0.4	4.9-6.7	45	4.5	0.9	2-7	47	6.1	0.4	5.2-6.8
How Long Participate												
Overall	116	5.8	0.8	3.4-7.0	107	5.2	1.5	1-7	116	5.7	0.8	3.7-7.0
First Grade	60	5.3	0.7	3.4-7.0	52	4.7	1.5	1-7	60	5.5	0.7	3.7-7.0
Fourth Grade	56	6.2	0.6	4.5-7.0	55	5.7	1.3	2-7	56	6.4	0.6	4.2-7.0
Males	52	5.6	0.9	3.4-7.0	45	5.2	1.6	1-7	52	5.8	0.9	3.7-7.0
Females	64	5.8	0.7	3.7-6.9	64	5.2	1.4	2-7	64	6.1	0.7	3.7-7.0
Site A	33	5.8	0.7	3.4-7.0	33	5.4	1.6	1-7	33	5.9	0.8	3.7-7.0
Site B	36	5.6	0.8	3.5-7.0	30	5.2	1.3	2-7	36	5.8	0.9	3.7-7.0
Site C	47	5.8	0.8	4.4-7.0	44	2.1	1.6	2-7	47	6.1	0.7	2.6-7.0

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Table 4

Mean, Standard Deviation, and Range of Children's Academic Achievement by Grade Level, Child Gender, and Site

	N	Mean	S.D.	Minimum	Maximum
Report Card Grades					
Overall	117	-.03	.99	-2.6	2.0
First Grade	60	-.04	1.0	-2.6	1.9
Fourth Grade	57	-.03	.98	-2.6	2.0
Males	52	-.21	1.1	-2.6	1.6
Females	65	.11	.90	-2.6	2.0
Site A	33	-.19	1.0	-2.4	1.2
Site B	36	-.02	.95	-2.6	2.0
Site C	48	-.07	.99	-2.6	1.8
Standardized Achievement					
Overall	117	53.5	26.7	2	98
First Grade	60	53.7	27.2	2	98
Fourth Grade	57	53.3	26.5	5	96
Males	52	52.1	29.8	2	98
Females	65	54.7	24.1	7	97
Site A	33	33.7	21.8	2	81
Site B	36	52.5	24.9	10	97
Site C	48	67.9	22.6	11	98

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Table 5

Regression Analyses for Out-of-School Activities on Academic Achievement by Overall Sample, Child Gender, and Grade Level

	Grade Point Averages				Standardized Achievement Scores			
	Adjusted R^2	R^2 Change	*F*	Final Beta	Adjusted R^2	R^2 Change	*F*	Final Beta
Overall Sample n = 116								
All Activities	.05	.07	2.9*		.01	.04	1.5	
Number of Activities				.02				-.16
How Often Participate				-.09				-.24
How Long Participate				.25**				-.05
Organized Activities	.10	.13	5.2*		-.01	.03	.88	
Number of Activities				-.58*				-.29
How Often Participate				-.63*				-.38
How Long Participate				.29*				.04
Unorganized Activities	.04	.07	2.7*		.02	.05	1.8	
Number of Activities				.23				.02
How Often Participate				.12				-.06
How Long Participate				.20*				.22*

	Grade Point Averages				Standardized Achievement Scores			
	Adjusted R^2	R^2 Change	*F*	Final Beta	Adjusted R^2	R^2 Change	*F*	Final Beta
First Grade n = 52								
All Activities	.12	.17	3.7*		.01	.06	1.2	
Number of Activities				-.13				-.09
How Often Participate				-.73				-.12
How Long Participate				3.2*				.25+
Organized Activities	.20	.25	5.3**		-.03	.02	.43	
Number of Activities				-.97**				-.36
How Often Participate				-.97**				-.41
How Long Participate				.33*				-.01
Unorganized Activities	.12	.16	3.6*		.05	.10	2.1	
Number of Activities				.27				.02
How Often Participate Participation				.09				.01
How Long Participate				.33*				.32*
Fourth Grade n = 56								
All Activities	.12	.17	3.7*		.02	.07	1.4	
Number of Activities				-.04				-.21
How Often Participate				-.21				-.39
How Long Participate Participation				.42**				.19
Organized Activities	.04	.09	1.9		-.02	.03	.57	
Number of Activities				-.03				-.23
How Often Participate Participation				-.15				-.37
How Long Participate				.30*				.08
Unorganized Activities	-.03	.03	.48		.01	.06	1.2	
Number of Activities				.12				-.04
How Often Participate Participation				.06				-.19
How Long Participate Participation				.15				.20

	Grade Point Averages				Standardized Achievement Scores			
	Adjusted R^2	R^2 Change	*F*	Final Beta	Adjusted R^2	R^2 Change	*F*	Final Beta
Males n = 52								
All Activities	.02	.07	1.3		.08	.14	2.6+	
Number of Activities				-.15				-.58+
How Often Participate				-.25				-.47
How Long Participate				.27 +				.33*
Organized Activities	.15	.21	3.6*		-.01	.06	.93	
Number of Activities				-.93**				-.52
How Often Participate				-.85*				-.27
How Long Participate				.33*				.17
Unorganized Activities	.04	.09	1.7		.03	.09	1.5	
Number of Activities				.33				-.22
How Often Participate				.17				-.21
How Long Participate				.25+				.27+
Females n = 64								
All Activities	.01	.16	1.3		.03	.08	1.8	
Number of Activities				.29				.42
How Often Participate				.18				.16
How Long Participate				.20				.05
Organized Activities	.06	.11	2.4		.05	.09	2.1	
Number of Activities				.15				.11
How Often Participate				-.04				-.19
How Long Participate				.32*				-.04
Unorganized Activities	-.01	.03	.70		.02	.07	1.4	
Number of Activities				.16				.27
How Often Participate				.17				.06
How Long Participate				.08				.11

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